

**Abstract of the Invention**

A system for regulating (*e.g.*, terminating) a development process is provided.

The system includes one or more light sources, each light source directing light to one or more patterns and/or gratings on a wafer. Light reflected from the patterns and/or gratings is collected by a measuring system, which processes the collected light. The collected light is indicative of the dimensions achieved at respective portions of the wafer. The measuring system provides development related data to a processor that determines the acceptability of the development of the respective portions of the wafer. The collected light may be analyzed by scatterometry and/or reflectometry systems to produce development related data and the development related data may be examined to determine whether a development process end point has been reached, at which time the system can control the development process and terminate development.